PECOS INFLOW WEST FCD GAGE ID# 6534

STATION DESCRIPTION

<u>LOCATON</u> - The gage is located west of 48th Street on an ADOT freeway drainage channel, south of Frye Road. Latitude 33° 17′ 39.4 North; Longitude 111° 58′ 58.8″ West. Located in S31 T1S R4E, in the Guadalupe 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed January 21, 2009.

DRAINAGE AREA – Undetermined

<u>GAGE</u> - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 0.75 feet, levels of January 28, 2009. The PT is located on the north bank of the channel.

There is no crest-stage gage at this site.

There is no staff gage at this site.

ZERO GAGE HEIGHT – Zero gage height is near the right toe of the channel at the gage, and is defined in gage height elevation.

HISTORY – Gaging established on January 21, 2009. No previous gaging history at this location.

REFERENCE MARKS

RP-1 is the west bolt of the top bracket, painted white. Elevation 10.48 feet gage height, levels of January 28, 2009.

<u>CHANNEL AND CONTROL</u> – The channel is trapezoidal and gunite lined. It is of uniform dimension downstream from the gage cross section for about 200 feet. Top width is 50 feet and bottom width is 10 feet with a maximum depth of about 10.0 feet.

The control for the gage is not defined at low flows. The channel is the control at higher stages.

<u>RATING</u> - The current rating is Rating #1, dated January 28, 2009. The rating was developed from a survey of three cross sections (upstream, at the gage, and downstream). Data were input into a HEC-RAS model for evaluation. The model used

profiles up to 2,000 cfs, after which water spills out of the channel. The flows were subcritical.

<u>DISCHARGE MEASUREMENTS</u> – Low flow measurements could be made. However, the sides of the channel are quite steep, and caution should be exercised.

POINT OF ZERO FLOW - The PZF is at about 0.05 feet gage height.

FLOODS – None recorded since installation.

REGULATION – None known.

DIVERSIONS - None known.

ACCURACY - Fair

JUSTIFICATION – Monitor flows into Pecos Basin

<u>UPDATED</u> - July 19, 2011

D E Gardner